

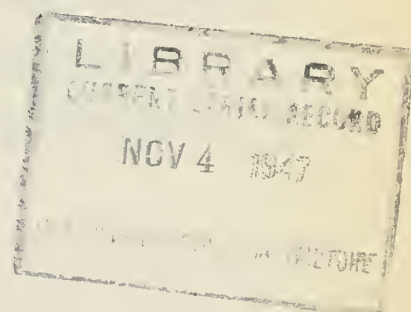
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SEPTEMBER 1947

MARKETING ACTIVITIES



10/9



U. S. Department of Agriculture
Production and Marketing Administration
Washington 25, D.C.

MARKETING FULL PRODUCTION

By Dave Davidson Page 3

In time to come, how high should the level of U. S. farm production be? Where do nutritional requirements, exports, and soil conservation fit into the long-run picture? And in the marketing of this production, what is the place of marketing services, regulation, new uses, surplus distribution programs . . . of increased consumption, tariff barriers, prices, and full employment?

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The Editor, Marketing Activities
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Marketing Full Production

By Dave Davidson

More and more these days I hear people refer to the period we are going through as the "golden age of American agriculture." They say something like this, "Just look at what's happening. Production is up. Prices are high. Farmers without a doubt are better off today than they've ever been. But boy! I sure do hate to look ahead 10 years from now."

Production and Prices

We can't argue about production. The production record, in view of the difficulties farmers have faced during the war and thus far in the postwar period, has been almost unbelievable. The record reads something like this: In 1942 the volume of food produced for sale and for farm home consumption was 125 percent of the 1935-39 average. In 1943 it was 133; in 1944, 138; in 1945, 138; and in 1946, 139 percent of the average. This year, despite very poor weather for the corn crop, total production is expected to be almost as large as in 1946.

Nor can we argue about the price level. The annual average parity ratio--the ratio of prices received to prices paid, interest, and taxes--has ranged since 1942 somewhere between 106 to 120 percent of the 1910-14 base period. So far this year, the ratio has averaged about 120 percent. And do you remember how some of us said, back in the 1930's, that we'd have one real celebration if we ever got parity?

Yes, we have agricultural prosperity today. But I don't have the same dark forebodings about the future that some people seem to have. I like to think, if there is going to be a retreat from the good times we are having now, that it will be an orderly retreat--not a rout. We have gained experience as we've gone along. We gained one type of experience during the dreary years of the depression. We gained another type during the fast-moving war and postwar years. But regardless of how we gained it, that experience should make it easier for us to cope with whatever rough going might lie ahead.

Before we do any speculating about the future, however, let's take a closer look at the components of our present prosperity.

The production side is rather familiar to us. The Government has asked for all-out food production to meet world needs and has backed up this request with a comprehensive price-support program. The farmers, for their part, have been able to comply with this request because of a combination of fortunate circumstances: (1) They have been able to draw

upon the fertility stored in the soil during the 1930's; (2) the weather --at least up to this year--has been unusually favorable; and (3) technological advances, such as the greater use of machinery, improved plant varieties, better bug killers and better weed killers, the extension of soil-conserving practices, and the wider use of fertilizers, have made it possible to raise the production level despite a shortage of manpower.

Domestic Demand

Domestic demand for our increased farm production is tremendous. We have a high level of employment--and employment at high wages. So far this year, salaries and wages have been running at an annual rate of 120.0 billion dollars. During the 1935-39 period, which was more favorable than the previous 5 years, salaries and wages averaged only 42.5 billion dollars.

What this increased purchasing power means to agriculture is revealed by current estimates of civilian per capita food consumption. In comparison with the 1935-39 period, meat consumption per capita has risen from 126 pounds to 155 pounds; eggs, from 37 to 47 pounds; chickens, from 18 to 24; dairy products, from 801 to 810; fresh fruits, from 138 to 148; fresh vegetables, from 235 to 260. And so it goes.

Can there be any further doubt about the interdependence of agriculture and industry? The steel worker, the coal miner, the railroad man, all the other nonfarm workers--they have a stake in the maintenance of a prosperous agriculture, not only because agriculture provides the food and fiber that industrial workers need, but also because agriculture is a market for products manufactured or the services performed by these people. Similarly, agriculture is vitally interested in the maintenance of a high level of industrial employment, not only because of the market that that employment creates, but also because agriculture wants and needs the goods and services provided by the nonfarm segment of our population.

Foreign Demand

The intense foreign demand for food comes, paradoxically enough, not from a high level of employment but from a lack of employment. Farmers abroad are unable to bring production up to normal because seed, fertilizer, livestock, and machinery are lacking. Transportation facilities are disrupted. Housing is inadequate. The weather has been unfavorable. Human vitality is at a low ebb. American food must help fill the gap until the war-devastated areas of the world become more self-sufficient.

We can take pride in what we have done so far to combat world starvation. During the 1946-47 fiscal year, our food exports totaled 18,433,000 long tons--a new high record. I am told that it would take a single railroad train stretching all the way from San Francisco, Calif., to Portland, Maine, to haul all that food. This year, as a result of the serious corn situation, the train may not be so long--unless we are

able to substitute quite a lot of other foods for the necessary outbacks that must be made in grain exports.

Well, that covers--in brief fashion--the major components of our present agricultural prosperity. Now, let's speculate a little bit on what might lie ahead--and let's be honest and admit that we can't forecast with precision.

Most of us will agree, I think, that the end of the present world food emergency will mean some adjustments in the pattern of our over-all agricultural economy. And most of us will agree that the planning for those adjustments should be started now--not later, when the crisis is upon us.

Let's start off with production.

First of all, we know that from now on we will be on a higher production level than was the case 25 years ago, say. We can be sure of that because many of the factors that have helped us increase production during this emergency period are on a one-way street. The extension of soil-conserving practices, for example, will continue. The search for better plants and animals will continue. The use of chemicals to combat insects and weeds will continue. The accumulation of knowledge of what makes for good cultural practices will continue.

But how much higher should the production level be?

Full Production

I have used the expression "full production" in the title of this talk. But I think that I should define my use of that expression. Full production, as I think of it, is what can safely be produced. It is, in other words, the production that will meet all our nutritional requirements as a Nation, a production that will enable us to maintain a wholesome volume of exports, and a production that will assure the conservation of our soil resources. There are several ways in which we can shift over to the harmonious type of full production.

We can, for example, place more emphasis on livestock farming, which, in turn, is based on the use of soil-conserving pasture. As we improve agricultural resources under a system of livestock farming, we will increase productive capacity, through increased soil conservation, and provide a good use for land that might otherwise be put to the production of surpluses. It should be remembered too, that an increased livestock population on our farms means an increased consumption of feed grains in the form of meat and milk.

Farmers have altered their regular rotation practices to increase the acreage of tilled crops, but they have plowed up sod and pasture to do it. Farmers also have altered their regular rotation practices to increase the acreage of wheat, but they have done this at the expense of grass and fallow. For the long pull, we must get back to the rotation type of agriculture that will eliminate the present "mining" of our soil.

We must increase our conservation practices all along the line. This will involve an increased use of lime and fertilizer. It will also mean a broader use of such practices as contour farming, strip cropping, terracing, the building of dams, and the planting of cover crops.

Marketing Problems

But the food we produce under any type of farming must be marketed. And, as we know, some of the most vexatious problems of agriculture lie within the marketing field.

Take domestic demand, which, in the final analysis, is a marketing problem. The demand for farm products is closely related to consumer purchasing power. That consumer purchasing power, in turn, is related to the level of employment. And employment, finally, is related to the over-all level of industrial activity. Because we don't know what industrial activity will be 10, 20, or 30 years hence, long-range planning becomes more difficult.

About all we can do today is recognize that there is an ebb and flow of industrial activity. Business is "good" at one time, "bad" at another, and only "fair" in between. Some day we may learn how to knock off the peaks and fill up the valleys--to stabilize our economy at some level that might be described as "fairly favorable." Economists all over the country are doing some constructive thinking on ways and means of doing this. That thinking is encouraging.

Passage of the Employment Act of 1946, in which Congress makes it a continuing policy to "promote maximum employment, production, and purchasing power" also is encouraging. This policy is implemented by the establishment of a Council of Economic Advisors to the President and the formation in Congress of a Joint Committee on the Economic Report to study the recommendations of the President and to make other surveys of the economic situation. I think, as the years go by, that the work of the Council and of the Joint Committee will go a long way toward the correction of our economic ills.

Foreign Demand a Marketing Problem

Foreign demand, too, is a marketing problem. From the short-range point of view, we have the estimate of the Food and Agriculture Organization that the strong foreign demand for food may continue until 1960. It may continue even longer. But it doesn't take too much imagination to envision a time when the war-devastated areas of Europe and Asia will recover agriculturally. So we can't use the present emergency period as a yardstick. Our yardstick must be some pre-World War II period when our exports were closer to what we think of as normal. Normal, by that yardstick, will mean smaller exports.

But we are learning. We are learning that, if we allow other countries to sell to us, we will be able to sell more to them. As Secretary Anderson said recently, "We need the benefits of an international organization to reduce trade barriers and to provide a world clearinghouse

for commodity agreements which preserve the principle of international economic collaboration without running contrary to domestic policy. Our domestic farm price policy precludes the removal of all trade barriers, but it should be possible through agreements to limit the use of trade barriers, to divide markets among competing countries without cut-throat competition, and to provide for the handling of excess supplies." Perhaps the permanent foreign market for agricultural products is smaller than we think. But if the export of industrial products could be expanded there would be more employment in this country and a stronger domestic demand for our food and fiber.

There are still other approaches to the problems of marketing. First of all, we need to know more about marketing. In that respect, the Research and Marketing Act of 1946 was passed by Congress at a most opportune time. This significant legislation, which authorizes agricultural research at all stages of the production and marketing process, will make it possible for us to increase vastly our knowledge of how to move farm products into consumption. The sum of \$9,000,000 has been appropriated for the current fiscal year and a number of projects are scheduled to get under way soon.

Some of these research projects will be carried on by various Department of Agriculture agencies. In the Production and Marketing Administration, for example, we have set up a new Marketing Research Branch to handle this type of work. Some will be carried on in the State agricultural experiment stations. Some will be carried on with public or private agencies, institutions, firms, or individuals under contract. Marketing covers a very broad field. Hence, the projects themselves will cover varied types of marketing activity.

Marketing Services, Regulation, and Spreads

There is, for example, the matter of developing better marketing services for agriculture. By marketing services I mean market news; market statistics; standardization; and inspection, grading, and classification. Considerable work already has been done along these lines, but more needs to be done--especially in the way of showing producers and consumers, through educational campaigns, the many ways that standards will benefit them.

Then there is the matter of marketing regulation. The Department of Agriculture has administered for many years a number of regulatory laws designed to assure fair play in the market place--laws such as the Perishable Agricultural Commodities Act, the Packers and Stockyards Act, the Commodity Exchange Act, and the Insecticide Act. Research may point the way to improved administration of these laws or to needed changes in the laws themselves.

And there is the problem of marketing spreads--the difference between what consumers pay and what the farmer receives. If marketing charges--the costs of retailing, processing, wholesaling, jobbing, transporting, financing, and packaging--can be reduced, the prices consumers pay will be smaller and returns to farmers will be larger. Work already

done in this field shows that marketing charges can be reduced. Marketing research will enable us to make a more intense attack on this front.

We can find new uses for farm products. As a matter of fact, considerable progress already has been made in that direction by the Department's four regional research laboratories, by the State agricultural experiment stations, and by private industry. We have barely scratched the surface when it comes to finding new uses for the products of our farms. Research in only one produce--soybeans--has proved that. Additional research in the field of new uses for all products should enable us to move forward much faster in our campaign to eliminate surpluses.

Stabilizing Human Consumption

One of the really big problems of marketing, however, involves stabilizing the human consumption of farm products here in the United States. Nutritionists know, according to age and activity, how many calories, proteins, vitamins, and minerals we need for health. These needs, translated into terms of meat, milk, eggs, grains, fruits, vegetables, fats, and so on, constitute a minimum below which we ought not go.

As Secretary Anderson observed recently, we need a floor under the consumption of farm products. We must make sure that nobody in this country goes hungry and that no production is wasted. We need to have a surplus distribution program or perhaps some sort of food allotment program available at all times--a program that will be flexible enough to meet both chronic and acute marketing problems.

School Lunch Program

The school lunch program is a start in this direction. Under the National School Lunch Act of 1946, it is declared to be the policy of Congress "to encourage the domestic consumption of nutritious agricultural commodities and other food . . ." Under the school lunch program, Federal funds are apportioned among the States according to the number of children enrolled in school and the per capita income of the State. The law requires that Federal funds accepted be matched dollar for dollar by the State until 1951. After 1951, the State contribution will be increased.

Families in all income brackets need more education in what makes for good nutrition. It is generally agreed that the small food budgets of low-income families can be made far more effective in obtaining adequate diets if the foods that can be included for an adequate diet and their relation to health are better understood. Many families in the middle- and upper-income classes are equally in need of guidance in the biological requirements for various nutritional elements and in the foods that supply these nutrients.

I am firmly convinced that the potential domestic market--with a few exceptions--can absorb what our farmers can safely produce. I am firmly convinced that the potential domestic market can absorb what our farmers can safely produce--and at fair prices.

I am not convinced that ruinously low prices are a marketing incentive. We learned that back in the 1930's. As prices of farm products dropped, farmers were unable to buy the goods and services the non-farm segment of the population was able to provide. This accentuated the unemployment problem in the cities. Unemployment in turn meant that nonfarm people were unable to purchase their normal amounts of food. So surpluses piled up. The vicious circle was complete.

Price-Support Programs

To achieve a balance, I think that we need price-support programs to protect farmers against disastrous declines in market values. Price-support programs, as I see them, are merely a device to put farmers on a par with other segments of our farm economy. What the permanent level of support should be, I won't attempt to say, but it should be high enough to avoid any repetition of the problem we had in the 1930's.

At the same time, we should guard against "pricing farm products out of the market." As I said a moment ago, there must be a good balance between the prosperity of the farm and the nonfarm segments of our population. Too-high prices for farm products can reduce consumption of foods vitally needed for nutrition. And if any price-support program leads to too-high prices, it is not doing what it was really designed to do.

The Over-All Program

The over-all program, in my opinion, should be something like this: Productionwise, we should try to meet nutritional requirements, provide for some exports, and endeavor to conserve the soil. Marketwise, we should widen market outlets through the maintenance of full employment, through some lowering of tariff barriers, through the provision of marketing services and regulations, through the narrowing of marketing spreads, through the discovery of new uses, and through increased consumption.

When all this is done, we should be in pretty good shape, agriculturally. There may be times, of course, when controls will have to be applied to insure "full production" but not "surplus production." Last year, for example, there was a world shortage of food. Yet our potato crop of 475 million bushels was just more than we could consume in this country--and potatoes, for a variety of reasons, are difficult to export. So this year, the price-support program for potatoes is geared to an acreage that is designed to give us a crop of 375 million bushels--a crop that is believed adequate for our people but one that will not lead to extensive waste.

Farmers, generally, don't like controls. A farmer's whole instinct is to produce. But he wants to market what he produces--and market it at a fair price. Although marketing is the least of the farmer's worries today, let's not forget that, only a relatively short time ago, marketing was his biggest worry. Marketing worries may not be too far over the horizon. Now is the time to look ahead and plan.

Quality Marketing of Poultry and Eggs

By Henry G. F. Hamann

During the war it was fortunate for the poultry industry that neither poultry nor eggs were rationed. As a result, there was an unprecedented demand for these products. If the quality was not too good, nobody said much about it, because half a loaf was better than no bread. Work on quality improvement was neglected and a large part of the pre-war advance in it was lost.

Carry Identified Quality Through to Consumer

Today we are on an expanded production basis, and we must work for quality in both production and marketing. The problem is to retain the initial fine quality of the product and to carry this quality, with the grade properly identified on the product, through the recognized marketing channels to the consumer.

Sound marketing programs can be developed only by attending carefully to the fundamental procedures involved. One of these procedures is a uniformly applied and uniformly administered grading program. Quality begins with production, so the producer or grower is the first person who should be concerned with developing a quality marketing project. His best approach is the one most direct. Too often we set up many needless hurdles which encourage no one--least of all the producer--to do a better job.

Business profits are usually the result of wise investments in money, time, and effort, and of the performance of a good job. One sure way of getting a good job done is to let the producer have a fair monetary reward for the time and effort he puts into producing a quality product. The development of proper price and quality relationships is fundamental to accomplishing this result. It cannot be done by buying eggs on a current-receipt basis or poultry by paying one price for all qualities and reducing the pay of the grower to cover the losses from grading a miscellaneous assortment of quality. These quality and price relationships can best be established through the development of official grading programs under which products are bought on a quality-grading basis and quality is recognized. Naturally, competitors will discourage the development of such a program by price cutting and many other devices. Some investment risks will have to be assumed before monetary rewards can be expected. Best results come from applying such a program uniformly in a locality for a long enough time to prove its merits. If there is enough perseverance, the program will succeed--and it will favor the producer, the handler or dealer, and the consumer.

Recently I heard it said about quality and profits: "Quality is like the stratosphere: the higher up you go, the less the pressure you

have to buck. The greater the quality control and supervision over what goes into your foods, the less you have to worry about price concessions that eat away your profits." How often are quality standards lowered for the sake of a few pennies of extra profit! Yet unless quality is maintained constantly, the confidence of consumers cannot be held. The practice of adjusting quality standards to suit the season of the year destroys buyer confidence and results in confusion.

Regulation Alone Will Not Assure Quality

Another important thing about quality and quality marketing is that they cannot be brought about by legislation alone. Governments necessarily maintain police forces, yet laws are violated every day. A law attempting to regulate the quality of any agricultural product as perishable as poultry products must fail unless it takes into account the need for quality control throughout the industry, from producer to consumer. We cannot separate one branch of the industry from the other. Human nature being what it is, laws are necessary, but we can make better progress by accenting education than by trying to regulate unruly trade members with a billy club. Legislation designed to improve handling methods in the distribution channels should be an adjunct to permissive grading and marketing programs. For best results these programs should run parallel, so that the benefits from one will reflect in the other.

What is the industry doing to turn out products of better quality? As an industry it certainly is not lacking in know-how, or in available scientific data to back up its judgment. Yet it has not begun to take full advantage of these assets. For example, developments in poultry processing machinery in recent years have gone a long way toward simplifying volume production, but what has been the result? Very often, the job of picking chickens is being done worse instead of better. The reason is that the processor sees more profit in larger volume and skips quality.

Recently I visited several poultry-packing plants in a large broiler-producing area. A reasonably good quality of chicken was being processed, but the end product looked more like something that had been dragged behind an automobile than poultry that had been handled by the best modern picking machinery. Under such circumstances, how can the producer be expected to do a better job, or the consumer to develop confidence in poultry?

Time, effort, and money are being spent to develop a better meat-type chicken and better egg-laying chickens. But it will be time, effort, and money largely wasted unless we handle these products so as to show to advantage the desirable features produced by better breeding.

It isn't the job of the State agricultural colleges or of any other public agencies to provide farmers with outlets for marketing their eggs on a quality basis. That is an industry responsibility. The State and Federal departments of agriculture, through their inspection and grading services, and the Extension workers of State colleges and others who are qualified and willing to give advice on marketing outlets cannot be expected to launch the program for the industry.

PROGRESS UNDER RESEARCH AND MARKETING ACT

A general statement of the progress made thus far under the Research and Marketing Act of 1946 was issued on August 29 by E. A. Meyer, administrator of the act.

The Research and Marketing Act of 1946 was passed unanimously by both Houses of the second session of the 79th Congress, the statement said, and was signed by the President on August 14, 1946, to become Public Law 733. Funds for putting the law into effect were first made available in the Agricultural Appropriation Act of 1948, passed July 30, 1947. Of the \$19,000,000 authorized for the current fiscal year, \$9,000,000 was actually appropriated. This amount is specifically divided as follows among the various sections of the new research act:

To the agricultural experiment stations of the States; Territories, and Puerto Rico--\$2,500,000 (Title 1, Section 9). This sum includes \$1,800,000 which will be distributed among these units as direct grants, according to a formula set forth in the act.

Funds allocated to the States, Territories, and Puerto Rico must be matched by them. (The current agricultural appropriation act excludes Alaska from the fund-matching requirement.) The individual States, however, invariably appropriate more for agricultural research than the amounts allocated to them by the Federal Government. The distribution of these funds to the States for the first quarter of the year has been completed. The law requires at least 20 percent of the funds to be devoted to marketing research. Recommendations or proposals submitted by virtually all the States so far indicate that nearly twice this percentage of the funds will be used on research intended to facilitate the marketing of farm commodities.

In addition to the direct grants, the State agricultural experiment stations also receive allotments from the regional research fund of \$625,000 authorized by Section 9b3. These allotments are available only for cooperative regional projects recommended by the Committee of Nine that has been established in accordance with the foregoing section. This committee, which is elected by and represents the directors of the State agricultural experiment stations, has recommended a program for regional research that is now getting under way. The members of this committee include eight experiment station directors--two for each of the four regions and one administrator of home economics research.

The sum of \$3,000,000 is provided for research on new and wider uses of agricultural commodities and their byproducts (Title 1, Section 10(a)). Accordingly, plans were nearly complete for a wide range of projects including poultry, dairying, livestock, wool, cotton, fruits and vegetables, tobacco, sugar, field crops, fats and oils, and forest products. A large share of this work will be undertaken by these USDA bureaus: Agricultural and Industrial Chemistry; Plant Industry, Soils, and Agricultural Engineering; Human Nutrition and Home Economics; and Entomology and Plant Quarantine. Under this section of Public Law 733 the Secretary of Agriculture may contract with private or public organi-

zations or individuals to perform research on a given project if in his discretion they can do the work more efficiently and at less cost than the Government. As the projects get under way they will be announced, Meyer's statement said.

For cooperative work with the experiment stations in research other than utilization on agricultural commodities, \$1,500,000 has been provided for the current fiscal year (Title I, Section 10(b)). Among projects contemplated under this section are those on mechanization of farming; animal breeding; reducing risks from insects, disease, and other risks in agricultural production; crop diversification; soil and water conservation; and improvement in the collection, analysis, and use of farm statistics. A large share of this work will be undertaken by the bureaus of Plant Industry, Soils, and Agricultural Engineering; Animal Industry; Dairy Industry; Entomology and Plant Quarantine; and Agricultural Economics. These funds will be used by Federal agencies to participate in regional research projects involving cooperation with the States.

The sum of \$2,000,000 is provided exclusively for developing a sound and efficient system for distributing and marketing agricultural products (Title II). This work involves studies on preparation of farm products for both domestic and foreign markets. Besides processing, packaging, handling, storing, and transporting, it includes studies of standards, grading, costs, margins, prices and market statistics, and other research that may be required to facilitate quality improvement and to reduce the cost of getting farm commodities from producer to consumer. Plans are well along, the statement said, toward assigning the marketing research work to the agency or agencies best equipped and qualified to conduct the specific projects. A big portion of the work under this title will be assigned to the Production and Marketing Administration and the Bureau of Agricultural Economics. When actual projects are approved, they will be announced.

The 11-man National Advisory Committee appointed by Secretary of Agriculture Clinton P. Anderson on October 24, 1946, has held four quarterly meetings as required by law. The next meeting is scheduled for October 2-3, when current work will be reviewed and plans for future research will be discussed.

Nineteen commodity advisory committees representing producers, industry, Government, and science have been designated. Each of them has met at least once and submitted recommendations to the Secretary of Agriculture and the National Advisory Committee for consideration in developing an over-all research program under the new act. Within the limits of funds the work planned for the current year reflects so far as practicable the recommendations of the advisory committees, the statement said. Work groups consisting of Department personnel have assembled pertinent background data on each commodity as a basis for planning a program.

Actual laboratory and field research will be performed largely by the State experiment stations and appropriate USDA agencies. Only a

small staff will be maintained in the administrator's office to assist in general direction and coordination and to maintain relations with the State agencies and other institutions cooperating in marketing, regulatory, and service programs.

For practical reasons the various commodities have been placed in four groups, and an assistant to the administrator has been made generally responsible for each group.

J. Roy Allgyer has been placed in charge of forest products and grain, feed, and seed crops. His experience includes work as a county agent and in marketing service in Ohio.

C. O. Bratley is in charge of fruits, vegetables, and tree nuts. He was formerly the senior pathologist in charge of the Bureau of Plant Industry, Soils, and Agricultural Engineering laboratory in New York City.

Maurice R. Cooper is in charge of cotton, sugar, tobacco, and fats and oils. He was formerly an agricultural economic statistician in the Bureau of Agricultural Economics, and for many years has specialized in cotton problems.

Harry C. Trelogan is in charge of livestock and animal products. Previously he headed the Research and Analysis Division of PMA's Dairy Branch.

Henry G. Herrell, formerly chief of the PMA Budget Division, was named executive assistant to the administrator on over-all administrative activities. He will also serve as executive secretary to the National Advisory Committee.

A Departmental Research and Marketing Advisory Group has been designated by the Secretary of Agriculture to cooperate in the formulation of over-all policy. The group consists of the heads of the following USDA agencies; Agricultural Research Administration; Office of Experiment Stations; Soil Conservation Service; Bureau of Agricultural Economics; Forest Service; Production and Marketing Administration; Farm Credit Administration; Office of Foreign Agricultural Relations; Extension Service; and the Rural Electrification Administration. The administrator of the Research and Marketing Act will serve as chairman of this group.

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AUGUST GRAIN EXPORTS ESTIMATED AT 1,761,000 LONG TONS

August exports of U. S. grain and grain products amounted to 1,761,000 long tons (67,471,000 bushels), USDA estimated on September 9. This included 216,000 long tons pre-shipped against September allocations. In terms of whole grain equivalent, long tons, the exports included 956,000 tons of wheat, 550,000 tons of flour, and 255,000 tons of other grains.

USDA APPROVES PROJECTS UNDER RESEARCH AND MARKETING ACT

Between September 8 and 18, USDA announced its approval of a number of projects to be conducted under the Research and Marketing Act of 1946.

New foreign outlets to be sought.--As a part of an over-all program to expand markets for U. S. agricultural products, USDA has approved action under the act to assign commodity specialists to work in this country and abroad to stimulate foreign demand for certain products grown in the United States. The products included are fruit, tree nuts, tobacco, cotton, rice, and other agricultural items that are usually produced here in excess of normal domestic needs.

This work is expected to become particularly significant when the supply of U. S. farm products gets much larger in relation to demand than it is now. The men assigned to the project will officially represent the U. S. Government in dealing with foreign government agencies, exporters, importers, and consumer groups abroad and will deal directly with foreign purchasing agents in the United States.

An important part of their work in this country will be to provide U. S. producers and shippers with first-hand information on marketing developments in western Europe, the United Kingdom, and elsewhere abroad and to learn what types of information and activity are most urgently needed to expand foreign outlets for our farm products. The commodity specialists will be under the supervision of USDA's Office of Foreign Agricultural Relations.

Research to preserve meat quality and nutrients.--Also approved is a project to develop methods of processing meat that will prevent deterioration in quality and nutritive value during processing, storage, and distribution.

Planned for the project are tests on samples of meat that have been processed by methods now in use by packers and farmers, and in freezer locker plants and curing plants, to determine the effect of these methods on flavor, tenderness, juiciness, color, and bacterial and mold content. On the basis of these findings, work can be done to develop processing methods that will more effectively preserve the food value and palatability of meats.

Little information is now available on the effects of different meat-processing methods in relation to keeping quality. But it is known that rancidity, moldiness, and bacteria cause heavy losses to the meat industry, and these losses obviously result in higher prices to consumers.

The project was assigned to the Bureau of Animal Industry for immediate initiation in cooperation with several State agencies.

Better poultry.--Another project recently approved is for combining inbred lines of chickens to produce superior hybrids for improvement in growth rate, carcass quality, fecundity, and viability.

The establishment and testing of combinations of unrelated lines of chickens to determine the economic value are a field of study that is almost untouched by current research. The work has been assigned to the Bureau of Animal Industry and will be carried on at Beltsville, Md., Purdue University, and at other State experiment stations and agencies as conditions may warrant.

As a part of the study, a regional testing station will be provided and appropriate techniques determined for calculating the potential value of hybrids that result from combining inbred lines.

Refrigeration methods for keeping produce fresh.--Improved methods of refrigerating fruits and vegetables from field to consumer will be sought in another project recently approved under the act.

One phase of the study will deal with precooling produce that is to be shipped in fresh form. The purpose is to determine possible benefits and to demonstrate how precooling can be done advantageously. Another important phase is to determine the advantages of prompt and continuous cooling of produce, from the time it is harvested until it is canned or frozen.

Most of the investigations will involve marketing research. This will include information on losses in marketability resulting from wilting and shrinkage, and a study of the advantages of refrigeration in preserving freshness and food value and in reducing spoilage. A comparison of different methods of refrigeration under varying conditions will also be made.

Kansas City, Mo., will probably be the principal market center for the study. Investigations will also be carried on in New York, Chicago, Baltimore, and Washington, D. C., and in shipping districts as necessary. Fruit and vegetable shippers, receivers and dealers, transportation agencies, and trade organizations both wholesale and retail will be asked to cooperate in the research program.

USDA's Bureau of Plant Industry, Soils, and Agricultural Engineering will direct the project.

Food consumption studies.--Another approved project will be the conducting of surveys to determine the requirements and kinds of food consumed by different groups within the population. The basic purposes of the surveys are to improve American diets and to expand consumption of agricultural products, especially those of which there is most likely to be a surplus.

The surveys will be under the supervision of the Bureau of Human Nutrition and Home Economics and will be carried on in cooperation with various State experiment stations. The surveys will be conducted as two projects. Purpose of the first will be to find out what kind and how much food is needed by persons according to age, sex, occupational activity, environment, and origin. Purpose of the second survey will be to get current information on how much of different foods is now consumed according to population groups--the information to be used as a

basis for estimating potential outlets for farm products and for developing programs to increase the quantity and improve the quality of food consumed.

A closely related project dealing with the nutritive value and palatability of food has also been approved for action by the Bureau of Human Nutrition and Home Economics. Its main purpose will be to determine, through laboratory research, improved ways of preparing foods--particularly those for which an increased market is needed--and new and varied ways of using them in everyday meals. Certain phases of this project will be done in cooperation with the Production and Marketing Administration, the Bureau of Animal Industry, and other agencies.

Plant disease forecasting service.--Also approved for action under the act is a regional program for forecasting the spread of crop plant diseases. Its purpose is to enable farmers to apply effective methods for controlling three major crop diseases as quickly as possible. The diseases are late blight of potatoes and tomatoes, blue mold of tobacco, and downy mildew of cucurbits.

Approval of the program is a step toward a well-organized Nationwide survey to determine the probability of crop damage from disease, so that growers may be warned as far in advance as possible. Preventive or control measures may then be applied.

Under the program three pathologists will be added to the staff of the Department's Bureau of Plant Industry, Soils, and Agricultural Engineering, the cooperating agency. They will be stationed at Newark, Del., Raleigh, N. C., and Ames, Iowa, to work in cooperation with State plant pathologists in compiling reports on the appearance and prevalence of these crop diseases. The reports will be coordinated at the Plant Industry Station, Beltsville, Md. Information from them will be made available to the public through appropriate channels.

Dairy cattle improvement.--Two research projects on dairy herd improvement have been approved. One will be aimed at developing strains of dairy cattle especially adapted to climatic conditions in the Southern States, and the other at getting higher production per cow for the small dairyman throughout the United States. Both projects will be conducted jointly by the Bureau of Dairy Industry and cooperating State experiment stations. The work will be coordinated with other phases of dairy cattle research now in progress.

In the first project, plans are to cross heat-resistant Red Sindhi bulls with Jersey or other domestic dairy breeds and to study the effect of further crossbreeding, outbreeding, or inbreeding on the development of desirable qualities in the progeny.

Work on the second project will center around systems of breeding that concentrate the genetic factors for high milk production; ways of getting quicker and better proof of sires capable of transmitting high production to their daughters; and methods for more accurately predicting the value of young dairy bulls. This project will be developed

in cooperation with several State experiment stations in the Midwest.

Reduction of egg losses in marketing channels.--Another approved project is aimed at reducing losses of eggs during handling, processing, packing, transporting, and warehousing. About 2 billion eggs--or 5 percent of all eggs produced annually--become inedible or are broken in transit from producer to consumer. Losses in quality are also greater than they should be. Under the new project, new studies will be made to determine the causes of breakage and quality loss, and the points where these losses occur. Research will be conducted to determine the ideal size, dimensions, and construction of cases and cartons that will more adequately protect eggs without extra cost.

The project has been assigned to the Production and Marketing administration. Handlers, warehousemen, and common carriers will cooperate.

Research on virus diseases of cherries.--The recent rapid spread of virus diseases among cherry and other stone fruit orchards in Oregon, Washington, and Utah has led to approval of a research program aimed at discovering the cause of the diseases and reducing the risk of them. The studies will be conducted by the Bureau of Entomology and Plant Quarantine and the Bureau of Plant Industry, Soils, and Agricultural Engineering in cooperation with the State experiment stations in Oregon, Washington, Utah, and Wisconsin.

Three types of disease will be studied--albino cherry, little cherry, and cherry yellows. Preliminary work will center on learning better methods of recognizing disease symptoms and on studies to determine which insects, if any, are responsible for spreading the diseases. Other work will be directed at finding the cause or causes of the diseases and methods of control or eradication.

Wind erosion.--A project of research on the mechanics of wind erosion has been approved and assigned to the Soil Conservation Service. It will be carried out at the Kansas State Experiment Station.

The wind erosion studies will include the development of basic information on the relation among wind, soil, vegetative cover, and topography that is necessary for the design of preventive measures. The information will be used to improve present wind-erosion control practices and to develop new ones. Permanent tunnels will be built for analytical studies of the action of wind erosion, and small wind tunnels will be developed and improved for field checking.

Underground irrigation water.--Studies of how to improve irrigation water supplies by recharging ground water storage will be made under a project approved and assigned to the Soil Conservation Service. The work will be done in California.

The irrigation information is needed in the development of means of improving the subsurface water supply in localities where it is insufficient to meet farming needs. Excess use of subsurface water is now

causing a rapid decline in ground water levels in some localities; it allows no reserve for emergency use, and necessitates continual deepening of wells. Investigation will be made of the quality, depth and availability, and efficiency in the use of subsurface water supplies. The results will permit the development of ways to utilize underground aquifers efficiently for storing and transmitting irrigation water.

Five economic research projects.--Five economic research projects to be conducted under the act have been assigned to the Bureau of Agricultural Economics.

One of these projects is called "Economic Utilization of Farm-Grown Feeds in Livestock Production." The purpose is to learn how feed production, feed utilization, and livestock production can be coordinated so as to bring maximum use of hay and pasture in profitable systems of farming in different parts of the country. If this can be done, it will relieve pressure on cash crops whose supply in future years is likely to be large in comparison with market outlets.

This project also gets into a new area of economic research--an analysis of grassland farming. The aim is to make an economic analysis of the opportunities for the use (1) of more grass, legume pastures, and forage crops, and (2) of supplementary high-protein oilseed meals in livestock production, as a basis for adjusting to a balanced agriculture in which soil-conservation practices and livestock enterprises are emphasized. The project will be conducted at Washington, D. C., and co-operating State agricultural experiment stations.

The other projects deal with prices and marketing. "Methods of Measuring Farm Expenditures and Income" will be an attempt to get better estimates of farm income and expenditures, and better measures of their distribution. Arrangements are being made with the Giannini Foundation at the University of California, experiment stations in Illinois and elsewhere, and the Bureau of Human Nutrition and Home Economics for co-operation in the work.

The purpose of "Analysis of Factors Affecting Prices and Uses of Fats, Oils, and Peanuts," another approved project, is to measure the major influences affecting the prices and consumption of fats and oils in a more thorough and comprehensive analysis than has been possible until now.

"Production, Price, and Consumption Analysis for Meat Animals and Meat" is the title of a project for determining and measuring the factors that influence changes in meat and meat-animal production, prices, marketing, and consumption. The Livestock Branch of PMA and other USDA agencies will cooperate with BAE in conducting this analysis.

Another project is designed to find out more about U. S. food consumption, so that the demand and potential markets for farm food may be evaluated more precisely. The Bureau of Human Nutrition and Home Economics and other Government agencies will participate in the study.

FIVE COMMITTEES RECOMMEND PROJECTS UNDER RESEARCH AND MARKETING ACT

Recommendations for research projects to be conducted under the Research and Marketing Act of 1946 were made recently in reports prepared by five commodity advisory committees. Commodities and commodity groups covered were dairy products, deciduous fruits, tobacco, wool, and grain.

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Dairy.--Problems involving disease control and more nearly complete utilization of milk and milk byproducts need immediate attention, according to the report of the Dairy Advisory Committee. The group made recommendations under two main headings--production and marketing.

Production research problems, in the order recommended, were: (1) Better health in dairy cattle, with emphasis on more effective control of Bang's disease and mastitis; (2) dairy cattle breeding, especially artificial insemination and wider use of proved herd sires; and (3) animal nutrition and feeding. The committee emphasized the need for developing facilities and harvesting methods that will retain the highest possible nutrition in forage.

Marketing research problems, in the order recommended, were: (1) More nearly complete utilization of milk byproducts as human food; (2) the organization of markets and merchandising; (3) disposal of waste water from dairy plants; (4) improved price reporting and price quotations from terminal markets; (5) seasonal variations in milk production; (6) studies of consumer preference and of how dairy products are used in the home; (7) methods of price determination as applied to Federal milk-marketing orders; and (8) the effect of local, State, and Federal regulations on the structure and operation of fluid milk markets.

A general recommendation by the committee was that the quality of dairy products needs improvement and that educational work is needed as much as research.

Deciduous fruits.--Research that will increase merchandising was given as the most important need for consideration under the act in the report of the Deciduous Fruit Advisory Committee.

The committee made these specific suggestions aimed at accomplishing this goal:

1. Increase educational work among distributors. This work should be based on thorough studies of distributing institutions that are now considered successful, and on better knowledge of consumer buying habits and taste preferences.

2. Determine means of improving the quality and condition of the fruit in various stages of the marketing process, so that it will be more likely to reach the consumer in optimum condition.

3. Conduct studies to determine more efficient methods of picking, packaging, processing, and storing deciduous fruits, and to develop better facilities for handling the fruit, especially in terminal markets.

4. Make available to producers and marketing agencies the information they need on seasonal supply and demand, prices, transportation conditions, and foreign markets, to help them produce and market the crop efficiently.

The committee also pointed out the need for new research toward wider and more complete utilization of the fruit crop through freezing, dehydration, canning, and new uses for fruit byproducts.

Under production research, the group strongly urged further work to find ways of controlling virus diseases of stone fruits. Better insecticides and fungicides and improved equipment for applying them also need further study, it said.

Tobacco.--Research that will bring higher quality and more orderly marketing is the work most urgently needed under the new act according to the recommendations of the Tobacco Advisory Committee.

As to quality improvement, the committee gave top priority to studies of fertilizers for tobacco, and methods of fertilizer application, breeding, and curing of tobacco. Such research should recognize that an increasingly larger share of our tobacco is being used in the production of cigarettes, the committee pointed out.

To improve the curing of tobacco, the committee recommended investigation of the right degree of heat for use, of the moisture, spacing, and timing of curing operations, and of barn construction, flue and furnace design, and kinds of fuel.

As to the need for a more orderly system of tobacco marketing, the committee recommended a thorough study of the causes of market gluts, to determine whether it would not be generally more satisfactory if farmers marketed their tobacco evenly throughout the marketing season.

To increase exports of American-grown tobacco, the advisory group suggested that the Government should establish a pilot plant to perfect new blends for use abroad and assign technical help to foreign countries to assist in the proper utilization of American tobacco.

Wool.--Research looking to a stronger national program for the production, marketing, and utilization of wool is the most urgent problem of the wool industry, according to recommendations submitted by the Wool Advisory Committee for work to be done under the act.

Pointing out that wool production has declined to a point where it supplies less than 50 percent of the U. S. domestic market and that it will continue to decline until wool growing becomes profitable, the com-

mittee urged first that studies be made to answer the following questions:

1. How large a sheep and wool producing industry should be maintained in this country?

2. What policies should be established in the U. S. Department of Agriculture to build up and permanently maintain required wool production on a basis that will encourage the wool grower to invest in the business?

3. What legislation is required to support the income of wool growers while required production is being developed?

4. What improvements can be made in the processing, utilization, marketing, and quality of wool.

In addition, the advisory group suggested that the results of chemical and technological research made so far by the military and other governmental agencies and the industry be correlated, so as to serve as a foundation for future research.

Grain.--Research that will reduce or eliminate the loss of stored grain should get early attention under the act, the Grain Advisory Committee said. Other important items especially in need of research are the development of better varieties of malting barley, a determination of the quality characteristics of soft white wheat grown in the Pacific Northwest, and a study of multiple points for the delivery of grain under future contracts.

As to grain storage, the committee's report points out that scientific methods for producing and harvesting grain crops have developed much faster than knowledge and practices concerning the safe storage of grain on farms. To correct this condition, the committee made three specific suggestions:

1. Design suitable structures for both farm storage and country elevators.

2. Improve or develop facilities for drying and conditioning grain and for the control of insect infestation and rodent damage.

3. Make economic studies to determine the costs and the returns or profits the producer might expect from the installation of such facilities.

The advisory group urged that research be carried on in cooperation with manufacturers to develop mechanical driers that will be safe, economical, and adapted for drying all types of corn, small grains, and forage. The magnitude of the soft corn problem has been such during the last 3 years that research should be initiated immediately to determine the extent to which soft corn has been the result of unsound farming practices.

MARKETING BRIEFS:

Cotton.--On August 29, USDA announced that it had bought approximately 3,914 bales of Average Peeler Comber and 2,980 bales of Peeler Strips through the Commodity Credit Corporation for export to Japan. This cotton waste was bought on competitive bids to meet War Department requirements. Total purchases of cotton waste to that date for this export program were: Peeler Comber, 11,550 bales; Upland Strips, 4,550 bales; and Peeler Strips, 2,980 bales.

Cover Crops.--The 1948* goals of principal winter cover crops call for a 48 percent increase over last year in the acreage of Austrian winter peas (74,000 acres in 1948); crimson clover, up 30 percent (to 92,000 acres); hairy vetch, up 39 percent (to 159,000); common and Wil-lamette vetch, up 8 percent (to 90,000); and common rye grass, down 28 percent (to 68,000). The goal for blue lupine--57,000 acres--is the same as this year's acreage.... USDA has announced a price-support program for hairy vetch, crimson clover, and Austrian winter peas of the 1948 seed crop. The support for hairy vetch will be 12 cents a pound; for crimson clover, 11 1/2 cents; for Austrian winter peas, 4 cents.... USDA announced September 12 that the Commodity Credit Corporation would pool for producers' account the blue lupine seed which had not been redeemed by producers in connection with the 1947 Seed Loan Program. This means that any proceeds from the sale of this seed above farmers' indebtedness plus costs to CCC will be prorated among producers of the seed.

Dairy Products.--Between August 29 and September 18, PMA announced the following activities concerning milk marketing agreements and orders: Recommendations on industry proposals for the amendment of Federal Milk Orders at Toledo (30) and Wichita (68); amendment of the Dayton-Springfield order (71); reopening of a hearing on a proposed amendment of the Philadelphia order (61); scheduling of a public hearing for the presentation of proposals to amend the Chicago order (41); and approval, subject to industry acceptance, of proposed amendments to the Greater Kansas City order (13) and the Suburban Chicago order (69).

Dry Beans and Peas.--July-December 1947 export allocations of 771,000 bags (100 pounds each) of dry beans and 1,900,000 bags of dry peas for specified areas outside the Western Hemisphere have been announced. The bean allocations include 297,600 bags for Italy, 176,400 for the United Kingdom, 132,000 for Austria, 66,100 for Greece, 6,600 for Switzerland, 2,200 for Ireland, and 89,800 as a contingency reserve. The dry peas allocations include 683,400 bags for the U. S.-U. K. Zone in Germany, 573,200 for the U. S. occupied area in Japan, 264,500 for Austria, 110,200 for the United Kingdom, 99,200 for Italy, 6,600 for Switzerland, 4,400 for Ireland, and 158,500 as a contingency reserve.... Support prices ranging from \$7.25 to \$9.45 per 100 pounds by specified classes of 1947-crop dry edible beans, U. S. No. 1, cleaned and bagged, f. o. b. country shipping points, were announced early in September.... A dry edible smooth pea goal of 380,000 acres for 1948 has been announced--the same as the 1947 goal, but substantially less than the

acreage indicated as being under cultivation this year. In addition, about 127,000 acres of wrinkled peas will be planted for seed and other purposes.

Fats and Oils.--On September 5, USDA announced that the United States has received a supplemental allocation from the International Emergency Food Council of 40,625 metric tons of copra from the Philippines. The total allocation of copra from the Philippines for 1947 is now 375,000 metric tons (240,000 metric tons, oil content). In addition, arrangements have been made with foreign countries under which the U. S. will receive 31,250 metric tons of Philippines copra from their allocations in exchange for copra or coconut oil shipped to those countries from the U. S.... On September 10, USDA announced fats and oils export allocations totaling 452.5 million pounds for the fourth quarter of 1947. This amount includes 36.3 million pounds allocated to export claimants in exchange for other fats and oils needed in the U. S. For the fourth quarter of 1946, final export allocations totaled 176.8 million pounds.

Potatoes.--USDA has announced the establishment of a 2,352,400-acre Irish potato goal for 1948. This goal includes 1,518,500 acres for commercial potato farms--the same as was allocated to such farms in 1947--and 833,900 acres for smaller potato-producing farms (less than 3 acres of potatoes) which are not classified as commercial potato farms. The total acreage is smaller than the 1947 goal of 2,517,000 acres, but slightly larger than the 2,238,700 acres actually planted in 1947. Under average conditions, it should produce approximately 375 million bushels, enough to fulfill anticipated requirements from the 1948 crop. ... Under a potato loan program for producers and dealers covering 1947 late-crop Irish potatoes, announced September 11, loan rates to either a producer or a dealer on potatoes suitable for approved permanent storage will approximate 75 percent of the September bulk (loaded on truck at farmer's gate) support price. They will be available on U. S. No. 1; U. S. No. 1, Size B; and U. S. No. 2, 1 7/8 inches minimum-diameter potatoes. Although this year's loan program supplements price support, it is essentially a financing aid designed to assist in the orderly marketing of late-crop potatoes over the marketing season. Last year a loan was a prerequisite to price support. This year, price support will be available to eligible producers whether they obtain loans or not.

Poultry.--USDA has announced a recommended national laying flock, on January 1, 1948, of 420 million hens and pullets that would be expected to provide 375 eggs per capita for domestic consumers--the same as the high rate of consumption this year. Such a consumption would exceed the prewar consumption by 77 eggs per capita.

Sugar.--Immediate discontinuance of all sugar inventory controls under the Sugar Control Extension Act of 1947 was announced by USDA on August 29. The action was possible because primary distributors had begun to catch up on their backlog of orders and were in much better position to meet current sugar requirements than they had been at the time industrial rationing was removed. Also, current supplies of sugar appeared adequate to meet normal consumer and industrial demand and provide for the establishment of a reasonable inventory.

ABOUT MARKETING:

The following addresses and publications, issued recently, may be obtained upon request. To order, check on this page the publications desired, detach and mail to the Production and Marketing Administration, U. S. Department of Agriculture, Washington 25, D. C.

Addresses:

Text of a radio talk in the National Broadcasting Company series, "The Third Horseman," by Clinton P. Anderson, Secretary of Agriculture, at Albuquerque, N. Mex. September 5, 1947. 2 pp. (Mimeographed)

Poultry Products Marketing--An Important Phase of Teaching, Extension, and Research, by W. D. Termohlen, Director of the PMA Poultry Branch, at Clemson College, S. C. August 26, 1947. 5 pp. (Mimeographed)

Let's Look Ahead, by W. D. Termohlen, Director of the PMA Poultry Branch, at Des Moines, Iowa. September 3, 1947. 7 pp. (Mimeographed)

The Cattle Situation and Outlook, by Charles A. Burmeister, PMA Livestock Branch, at Broken Bow, Nebr. August 29, 1947. 8 pp. (Mimeographed)

Publications:

Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products. (PMA) August 1947. 83 pp. (Multilithed)

The Wholesale Markets for Fruits, Vegetables, Poultry, and Eggs in Atlanta, Ga. (PMA) August 1947. 147 pp. (Mimeographed)

Dairy and Poultry Market Statistics, 1946. CS-23. (PMA) June 1947. 72 pp. (Multilithed)

Cold-Storage Prospects for Apples and Pears in 1947. (PMA) September 1947. 8 pp. (Mimeographed)

U. S. Standards for Grades of Canned Green Beans and Canned Wax Beans. Effective September 27, 1947. 14 pp. (Mimeographed)

The sixth, seventh, and eighth of a series of 2-page mimeographed releases, for use in connection with egg quality conservation, which PMA and the State offices and Extension Service were asked to emphasize during the hot-weather months. Titles of the three releases are: When You Buy Eggs; Proper Packing Methods Help To Conserve Egg Quality; and Egg Quality Conservation Is Retailers' Responsibility.

School Lunch Recipes Using Dried Eggs. (Bureau of Human Nutrition and Home Economics) September 1947. 6 pp. (Mimeographed)

